### CHAPTER 2 GRAPHIC GUIDELINES

**2-1. Typography.** Two typefaces are used in the signage system: helvetica medium and helvetica regular (with the exception of traffic control signs which follow guidelines in *Standard Alphabets for Highway Signs and Pavement Markings* published by the Federal Highway Administration). Since typefaces are not completely standardized in the printing and signage industries, any typeface being considered must be visually matched with examples shown in figures 2– 1 and 2-2 and in appendixes C and D).

a. Helvetica medium. Helvetica medium, as shown in figure 2-1, is the primary system typeface and is used for major information on all signs.

b. Helvetica regular. Helvetica regular, as shown in figure 2-2, is used for secondary information on signs and for translations of foreign languages using reman characters. Helvetica regular is never used in a situation requiring arrows.

c. Letter spacing. Applications of letters should be

# **ABCDEFGHIJKLM NOPQRSTUVVXXX** abcdefghijklmno pqrstuvwxyz 1234567890 **&\$-.,'()/←**

Figure 2-1. Helvetica medium typeface.

proportionately spaced to maintain visually equal spacing and alignment. Mechanically equal spacing will not be used.

(1) Letter spacing standards. Letter spacing standards should be followed for both helvetica medium and helvetica regular typefaces. These standards are based on a unit system. Each unit is equivalent to 1/50th of the capital letter height. The spacing chart shown in figure 2-3 shows how many spacing units are required between characters. To illustrate, the first character is selected from the left column on the chart and the following letter from the top row. The number of spacing units appears at the intersection of the selected column and row; thus, the letter "A" followed by the letter "i" required three spacing units measured from the widest point of each letter. Insert 20 units between

words and 6 units before a punctuation mark (. ,;; '). Insert zero units before and after a slash (/). The above letter spacing standards should be utilized to prepare a master sign as a reference for visual spacing. An example of correct letter spacing is shown in figure 2-4. Follow the grid drawing accompanying each sign illustration for correct placement of arrows.

(2) *Tile system*. Adhesive-backed vinyl die-cut letters supplied on proportionately sized paperboard tiles are an alternative letter spacing method. Figure 2-5 illustrates this spacing method. These tiles are notched to assure vertical alignment. Tiles are applied to the sign face following the grids in this manual. The tiles are placed next to each other, lining up the alignment notches with the grid lines drawn on the sign face. Tile systems allow installation personnel to prepare profes-

# **ABCDEFGHIJKLM** NOPQRSTUVWXYZ abcdefghijklmno pqrstuvwxyz 1234567890 &-.,'() / ~ · · ·

Figure 2-2. Helvetica regular typeface.

sional quality signs with minimal training. Since letters are available individually, any message can be prepared as required, provided that an inventory of character tiles is maintained.

(3) Prespaced system. Adhesive-backed vinyl diecut letters, prespaced and aligned on a transparent carrier sheet, are another alternative letter spacing method. Messages are applied to the sign face, following the grids in this manual, by adhering one continuous line of type aligned with grid lines drawn on the sign face. This

allows installation personnel to prepare professional quality signs quickly with minimal training. No inventory is required; however, lead time is necessary for manufacturers to prepare ordered messages.

d. Standard arrows. All guide and informational signage intended for pedestrian use, either exterior or interior, must use the arrow shown in figure 2-6. Arrow proportions are given in units equivalent to 1/50th of the capital letter height of the message with which the arrow is used.

	vwxy	ftz	acdeg oqs	mnpru	bhijkl
Т	-3	1	_1	0	4
AKVWY	<b>–1</b>	0	1	2	3
F	0	1	2	3	4
XZ	1	2	3	4	5 5
CLP	1	2	3	5	5
DOQS	2	3	5	6	7
BEGR	3	5	6	7	8
HIJMNU	4	5	6	8	8
kvwxy	0	1	2	3	4
rz	1	2	3	5	5
cft	2	3	4	5	4 5 6
beops	2	3	5	6	7
ahmnu	3	5	6	7	7
dgijlq	4	5	7	8	8
	147	2	3	0	5689
0	4	5	5	6	7
1	6	7	7	8	8
7	2	3	3	4	8 5 5 8 7
24	3	3	4	5	5
38	5	6	7	7	8
569	5	5	6	7	7

	AX	BDEFHI KLMNPR	cgogs	JU	TY	vw	Z
1	5	6	3	5	5	5	6
2	5	6	3	5	0	0	6
4	0	6	3	5	<b>-2</b>	<b>-3</b>	3
7	7	6	3	<b>-2</b>	6	5	3
356890	<b>-2</b>	5	2	2	-3	<b>-1</b>	5

Figure 2-3. Letter spacing standards.

- **2-2. Sign layout.** Sign layout is determined by a sign grid as illustrated in figure 2–7. The grid is based on a proportional relationship of the capital letter height or "cap height" used on each sign. Exact measurements are specified on the sign grid for placement of messages. The size of the sign is based on a proportional relationship of cap heights using modular increments of 6 inches as specified for each grid.
- a. Margins. Margins are proportional to the maximum cap height used on each sign. Four-inch margins are used for a 6-inch cap height. Three-inch margins are used for 4- and 3-inch cap heights. The bottom margin is equal to the maximum cap height.
  - b. Line spacing. Use one cap height space between

- consecutive messages. Use one cap height space of the preceding message between consecutive messages having different cap heights. Use one-half cap height space between consecutive lines of a message requiring two or more lines.
- c. Line length. Maximum character counts are based on an average character width of 35 spacing units for helvetica medium and 30 spacing units for helvetica regular. The average character count includes letters, spaces between words, and punctuation marks.
  - d. Layout guidelines.
- (1) Good judgement is the key to deciding where the lines should break in a sign message. Single ideas or names should appear on the same line as follows:



### **Ft Lewis**

**Correct Spacing** 

Ft Lewis Ft Lewis

**Too Tight** 

**Too Wide** 

Figure 2-4. Correct letter spacing.

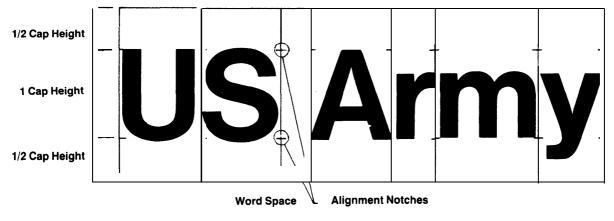


Figure 2-5. Example of the tile system for letter spacing.

- (a) Headquarters Fort McPherson
- (b) not, Headquarters Fort McPherson
- (2) Names should be spelled out in full whenever possible, unless otherwise specified in the authorized unit name, as follows:
  - (a) 4th Infantry Division
  - (b) 4th Battalion 61st ADA

If abbreviations are required, they must be in accordance with AR 310-50.

(3) Numbers should be used for the titles of military units except corps, which are designated by Roman numerals, and armies, which are spelled out in accordance with AR 340-15, as follows:

- (a) Eighth US Army
- (b) 56th Artillery Brigade
- (4) Line breaks should be balanced, as follows:
  - (a) Material Development and Readiness Command
  - (b) Engineering Plans/ Real Property
  - (c) United States
    Post Office
  - (d) Authorized
  - (e) Training and Doctrine Command
- e. Correct and incorrect sign layout. Examples of correct layout and several incorrect layouts are shown in figure 2-8.

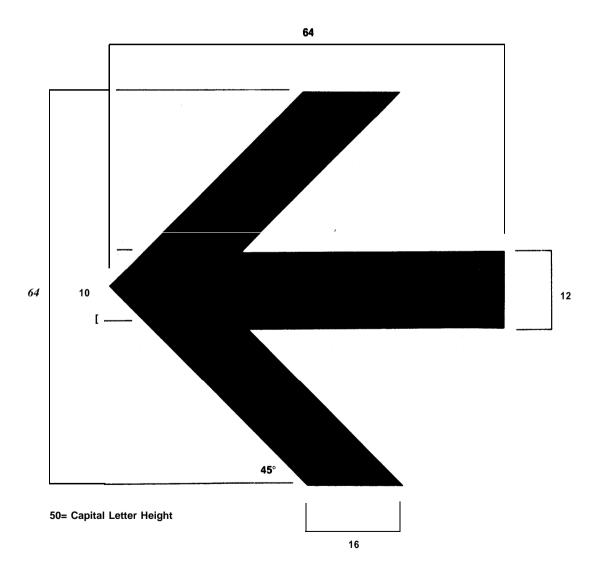
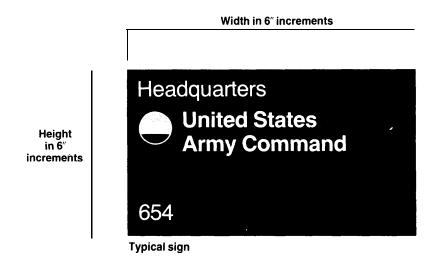


Figure 2-6. Pedestrian arrow.



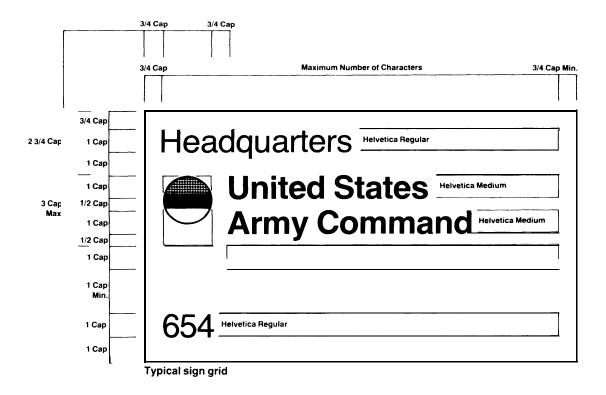
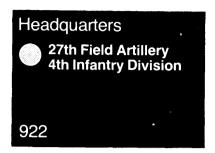


Figure 2-7. Typical sign grid.



**Correct layout** 

922

Headquarters

27th Field Artillery

4th Infantry Division



Incorrect use of **Helvetica Medium and** Regular typeface



Incorrect line sequence and letter spacing

Headquarters



**Helvetica Condensed** 

Figure 2-8. Correct and incorrect sign layouts.

**2-3. Color.** Standard colors for Army signage are listed in tables 2-1 and 2-2. Colors for military emblems must be in accordance with The Institute of Heraldry, US Army, HQDA(DAAG-HDZ-A), Cameron Station, 5010 Duke Street, Alexandria, Virginia 22314, whose specifications utilize colors from the Standard color card of America, The Color Association of the United

States, Inc. Branch colors are listed in table 2-2 in accordance with AR 670-1. Standard colors developed for the Federal Highway Administration are utilized on guide and mandatory/prohibitory signs. Colors for safety signs are in accordance with AR 385-30. Paints, inks, and reflective sheeting materials used in the production of signs must match the above standard colors.

Table 2-1. Standard Colors

General	Color	Federal Standard 595a	PMS*
Military	Standard Brown	Semi-gloss 20059	476
Community	Standard Blue	Semi-gloss 25102	301
Mandatory/ prohibitory Guide/information Mandatory/	International Blue Standard Green	Gloss 15180 Semi-gloss 24108	300 357
prohibitory	Standard Red	Semi-gloss 21105	187
F,	Standard Black	Semi-gloss 27038	Process Black
	Standard White	Semi-gloss 27875	White
	Standard Tan	Semi-gloss 20372	451

<sup>\*</sup>PMS—Pantone Matching System

Table 2-2. Branch Colors

Branch	Color	Cable Number
Adjutant General Corps	Dark blue/scarlet	65012/65006
Air Defense Artillery	Scarlet	65006
Armor	Yellow	65002
Army Medical Specialist Corps	Maroon/white	65017/65005
Army Nurse Corps	Maroon/white	65017/65005
Branch Immaterial	Teal blue/white	70147/65005
Cavalry	Yellow	65002
Chaplains	Black	65018
Chemical Corps	Cobalt blue/golden yellow	65011/65001
Civil Affairs, USAR	Purple/white	65009/65005
Corps of Engineers	Scarlet/white	65006/65005
Dental Corps	Maroon/white	65017/65005
Field Artillery	Scarlet	65006
Finance Corps	Silver gray/golden yellow	65008/65001
General Staff	No color assigned	
Infantry	Light blue	65014
Inspector General	Dark blue/light blue	65012/65014
Judge Advocate General	Dark blue/white	65012/65005
Medical Corps	Maroon/white	65017/65005
Medical Service Corps	Maroon/white	65017/65005
Military Intelligence	Oriental blue/silver gray	70209/65008
Military Police Corps	Green/yellow	65007/65002
National Guard Bureau	Dark blue	65012
Ordnance Corps	Crimson/yellow	65013/65002
Quartermaster Corps	Buff	65015
Signal Corps	Orange/white	65004/65005
Staff Specialist, USAR	Green	65007
Sgt. Maj. of the US Army	No color assigned	
Transportation Corps	Brick red/golden yellow	65020/65001
Veterinary Corps	Maroon/white	65017/65005
Warrant Officers	Brown	65016



Figure 2-9. Service symbols.

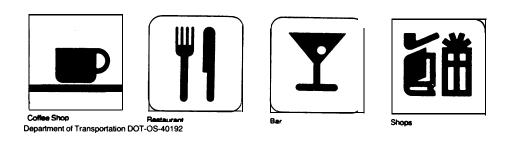


Figure 2-10. Concession symbols.



Figure 2-11. Regulation mandatory/prohibitory symbols.

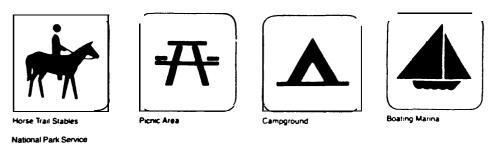


Figure 2-12. Sample of National Park Service symbols.

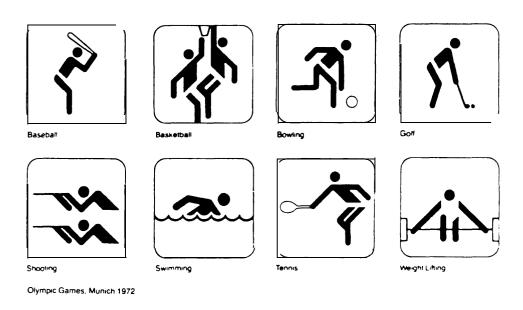


Figure 2–13. Sample of Olympic Games symbols.

#### 2-4. Military emblems.

- a. Department of the Army Plaque. The plaque is displayed on base identification signs to emphasize the heritage and professionalism of the United States Army. The design of the plaque must be in accordance with AR 840–1, and it must appear in full color.
- b. Unit emblems. Military units may use their branch insignia, shoulder sleeve insignia, coats of arms, or distinctive unit insignia on their headquarters signs as described in chapter 3. In addition, insignias, coats of arms, and unit mottos may be used on motivational signs to symbolize the honor and prestige of a military unit. Military emblems must appear in full color.
- **2-5. Pictographs.** In addition to standard symbols in the *Manual on Uniform Traffic Control Devices*, the symbols described here are for use on Army exterior and interior signs. The symbol background border must be square with

- rounded edges and the line weight of the border must be consistent for all symbols.
- a. Service symbols. The service symbols shown in figure 2–9 were developed for the Department of Transportation (DOT) for use in transportation-related facilities. The pictograph should be black against a white background, with the following exceptions:
- (1) Accessibility for the handicapped. When used for traffic control, this symbol must I follow standards in the Manual on Uniform Traffic Control Devices. Accessibility for the handicapped symbols should be used in accordance with DoD Manual 4720. l–M, with additional identification and directional signage as required. The symbol is composed of two elements, a white wheelchair figure (which should always face right) on a square background, international (safety) blue in color (Federal Standard 595a, color #15180). In areas serving the visually handicapped, the symbol, letters, and

numbers should be raised or indented 1/16 inch with letters or numbers 2 to 3 inches in height.

- (2) First Aid. Red cross on a white background.
- b. Concession symbols. The symbols for concession services are shown in figure 2–10. The pictograph should be black on a white background.
- c. Mandatory/prohibitory symbols. Symbols for mandatory/prohibitory signage illustrated in figure 2–11 were developed to regulate safety instruction and pedestrian traffic. The symbols are not intended for traffic control, with the exception of "Parking" and "No Parking." The pictograph color standards are as follows:
- (1) Fire extinguisher. Red pictograph on a white background.
- (2) No entry. Red pictograph on a white background.
- (3) Smoking. Black pictograph on a white background.
  - (4) No smoking. Black pictograph with red

- circle and slash overlay on a white background.
- (5) Parking. Green "P" on a white background.
- (6) Reserved parking. Black "P" on a white background.
- (7) No parking. Black "P" with red circle and slash on a white background.
- (8) No dogs. Black pictograph with red circle and slash overlay on a white background.
- d. Sports and recreation symbols. The recommended sports and recreation symbols are illustrated in figure 2-12. These symbols were developed for the National Park Service (see bibliography). The pictograph should be black on a white background.
- e. Olympic Games symbols. Sports symbols developed for the 1972 Olympic Games are presented in figure 2–13 and should be used for those activities not covered by the National Park Service symbols. The pictograph should be black on a white background.